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Forestry and the Environment: Nepal Case Study

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Summary

USAID assistance in forestry development in Nepal has focused on developing the capability of the Government of Nepal to implement its community forestry program. The program's approach entails turning over management responsibility and use rights of state-owned forests to local groups who in turn receive technical assistance from the forest service and nongovernmental organizations (NGOs). The community forestry program also encourages local user groups to expand and improve forest areas on marginal and degraded lands. Although the program does not transfer land ownership to the people, it allows them to manage the forests for sustainable harvest of products and income.

Since the early 1980s, USAID has channeled assistance through a collection of projects to support Nepal's efforts at sharing forest management with local user groups. Over the past 15 years, an estimated \$45 million in USAID funds has been allocated to the community forestry program and to policies and institutions bearing directly upon it. USAID has worked to:

Develop and test local forest management schemes;

Foster reforms for forest management policies;

Strengthen the capacity of public institutions and NGOs to implement community forestry programs.

As a result, a model of community forestry management has been developed and adopted; the government has begun to hand over the management of forests to local user groups, who are organizing, soliciting support to develop land use plans, and adopting forest protection practices; and through the sale of forest products, they are learning how to manage the financing of community development projects.

In November 1993, CDIE conducted a field study to identify and assess USAID-supported approaches that have since the late 1970s promoted environmentally sound forest management in Nepal. This Highlights summarizes the findings of that field study, which is part of a global assessment of the Agency's environmental programs. The field study is one of six country case studies, which include the Philippines, Pakistan, Mali, the Gambia, and Costa Rica.

Background

Nepal's community forestry program evolved over a 20-year period in which the Department of Forests within the Ministry of Forests and Soil Conservation at first had total responsibility for the protection and management of all forest lands. In 1957, the Government of Nepal nationalized all forested lands to eliminate private ownership over vast stretches of valuable forests.

Nationalization brought all forest resources into government ownership, ostensibly so that those resources could benefit the country as a whole, not a wealthy few.

The character of Nepal's hill landscape, with forest patches surrounded by private agricultural land and dwellings clustered in villages, when combined with a lack of roads, made government protection and management of these forests almost impossible. Protection and management responsibility for the forest lands was in the hands of Department of Forests, which was understaffed and poorly equipped. Encroachment, unrestricted harvest, and a lack of effective enforcement led to a decline in forest quality as well as area. This decline and a growing global concern over deforestation forced a reevaluation of Nepal's forest management approach.

By the late 1970s, the extensive clearing of Nepal's forests and the overcutting and overgrazing of forests and shrublands adjacent to farming areas had become an issue of pressing concern to the government. In many localities, forest cover necessary to maintain ecological balance had either been destroyed or degraded so badly that natural regeneration was not occurring. Moreover, it was clear that the government alone was incapable of enforcing forest protection laws.

In 1977, after 20 years of failed state protection, the government amended the 1961 Forest Act to provide for participation by the people in forest protection and management. This legislation provided the legal basis for establishing community managed forest lands (Panchayat Forests and Panchayat Protected Forests), leasehold forests, and private forests. Although this amendment provided the legal foundation for community forestry, the mechanisms for implementing the policy and the bureaucratic motivation to implement the policy required another 15 years to develop.

By 1988, Nepal had adopted the Master Plan for the Forestry Sector that included 12 separate environmental protection programs, of which the community forestry program was one. The Master Plan was a 3-year effort to set the stage for future forestry development. Among the 12 programs, the Master Plan clearly identified the community forestry program as a top priority for future development and donor funding.

The community forestry program builds on indigenous and traditional systems of forest protection and product distribution. Many forest patches had always been under systems of local management, and other new systems largely resurrect previous management scenarios.

At the same time, the community forestry program runs counter to hierarchical Nepali social organizations as well as to highly centralized government structures. Implementing the program has been slow because of these cultural and administrative constraints.

USAID's Assistance Approach

U.S. assistance in forestry sector development in Nepal began in 1955. With a 40-year track record of development activities in Nepal and a large number of Nepalese senior government officials having U.S. educations, USAID has been in a prime position to influence policy development there. This influence is also enhanced in the field by the presence of the Peace Corps.

USAID assistance in this sector has more recently focused on developing the capability of the Government of Nepal to implement its community forestry program. USAID has worked to:

develop and test local community approaches for forest management;

foster policy dialogue leading to the establishment of the legal framework for implementing community forestry activities;

strengthen the ability of national and local public institutions, and private NGOs to facilitate the implementation of community forestry practices;

assist in human resource development that trains personnel to extend community forestry;

increase production on community managed forest resources.

USAID has carried out these activities through projects that have had resource conservation components. The projects include (1) two Resource Conservation and Utilization Project (1980-89), (2) the Rapti Integrated Rural Development Project (1980-89, 1987-95), (3) the Nepal Coppice Reforestation Project (1986-92), (4) the Nepal Resource Management Project (1989-92), (5) the Institute of Forestry Project (1987-95), (6) the Forestry Development Project (1989-95), (7) the two PVO co-financing projects (1982-88, 1987-97).

Not all the funds obligated to these projects were destined for community forestry. For instance, the Resource Conservation and Utilization Project (RCUP) and the Rapti Integrated Rural Development Project (Rapti) are mutisectoral efforts. The objectives of the \$27.5 million RCUP, before its termination in 1989, were to assist the Government of Nepal in protecting and restoring soil, water, and plant resources on which rural subsistence farmers are totally dependent and in developing institutional infrastructure to manage natural resources. The objectives of the \$18.8 million second Rapti Project are to improve income, farm production, and other measurable quality of life indicators in the project area and to increase local demand for, and control of, extension systems for agriculture, resource management, health, family planning, and education.

RCUP, particularly in its final years, attempted a participatory approach to development. It set up catchment conservation committees in villages to coordinate activities and organize local participation in work projects. The second Rapti Project experimented with organizational structures for community forestry management, developed methods for preparing forest management plans, and provided training for Department of Forests' personnel in community forestry extension techniques. The project is also planning to assist established community forestry user groups to benefit economically in the harvest and utilization of forest products.

Another USAID initiative, the Nepal Resource Management Project, funded NGOs, whose effectiveness was found to be in implementing small-scale integrated rural development projects and in facilitating the extension of community forestry. This \$400,000 effort received additional support through the PVO Co-Financing Project. The \$8.7 million Institute of Forestry Project evolved as a cooperative effort involving USAID, the World Bank, and the Government of Nepal. Its objective was to train Institute graduates to practice community forestry.

The \$5 million USAID Forestry Development Project, housed in the planning wing of the Ministry of Forests and Soil Conservation, is designed to develop planning functions. The project's central objective is to increase the productivity and sustainability of Nepal's forest through policy reform and institutional strengthening.

Through PVO co-financing, USAID channels funds to a number of NGO project activities that combine a bottom-up, grass roots approach to integrated rural development. These projects place more emphasis on initiating self-help programs directly with village farmers than on developing the ability of the government to deliver development services. Through these projects, USAID had allocated an estimated \$45 million to community forestry and to policies and institutions bearing directly upon it (see Box 2).

Findings

Program Implementation

USAID-sponsored training activities have contributed to the ability of the staff of Nepal's Department of Forests to extend community forestry. Over the years USAID-sponsored training activities have effectively built the administrative and technical capability of the Department of Forests. Many senior department members received training in the United States under USAID sponsorship and have been key to the development of legislation that set the stage for community forestry development in Nepal.

With the development of the community forestry program, USAID training began to focus on field implementation. Institute of Forestry faculty who were trained under the RCUP and Institute of Forestry Projects became the trainers for a new generation of forest officers and rangers needed to implement community forestry.

USAID-sponsored training of user group members is also raising their awareness and capacity to manage community forests. USAID support of the Rapti Project has provided training for user groups. NGOs are also working with forest users to increase the users' capability to manage community forests. The evaluation team considered the NGO approach of using village resident motivators to be effective in providing training to user groups.

By working with the District Forest Officer, NGOs, or contract technical assistance, user groups' success in preparing acceptable community forestry operational plans has increased as has their success in implementing them. Approximately 2.6 percent of land in Nepal deemed suitable for community forestry has been formally turned over to user groups. Close working relationships between NGOs and Nepal's Department of Forests staff, facilitated by USAID, has accelerated user group formation and management plan preparation.

Through the sale of forest products or the rights to them, user groups are learning how to manage funds for the financing of community development projects. At most community forestry sites visited by the evaluation team, users were selling products from the forest and banking the returns in a user group account. Sales varied from charging a fee to cut grass or extract dead wood to revenues from harvesting trees. Funds were then available for community development activities.

There has been a marked change in the last 3 years (since the arrival of multiparty democracy) in the level of awareness that villagers have about community forestry. This is manifested by the marked increase in the number of requests by village-organized user groups for turnover of management authority. Although villagers normally distrust government officials, the perceived benefits of community forestry outweigh villagers' reticence, as they place an increasing demand on government forest offices and NGOs for technical assistance.

To date, technology introduction has not been a major part of the community forestry program. Exotic species trials have been conducted, and some, such as the napier grass, introduced by the RCUP, have been successful. Donor-funded projects have developed nursery and plantation techniques used in community as well as private forestry activities. Efforts to discover more productive and easily multiplied species led to validation of the notion that local species frequently provide better results than exotics.

In the Mustang District, where rainfall is insufficient to support reforestation without irrigation, CARE has been experimenting with various methods of vegetative propagation of willows and poplar species. They have also introduced interplanting of forest herbs and grasses that show promise, given the increase in commercial demand for hay. In fact, the evaluation team calculated that the forage grown in irrigated woodlots was more valuable than the wood itself.

USAID has influenced policy change through input to the development

and implementation of the Master Plan for the Forestry Sector. The Master Plan places community forestry within an overall strategy of forestry development and allocates a substantial portion of development funding for the community forestry efforts. The Master Plan development effort was spearheaded by a 3-year design project funded by the Finnish Development Agency. USAID provided input to the community forestry sections of the Master Plan based on the lessons learned in participatory management in implementing RCUP and Rapti. It also played an important role in drafting and encouraging the passage of the 1993 Forest Act. The Act gives legal status to user groups, allows community forest user groups to sell and distribute forest products, and decentralizes (from the regional to the district level) the process by which national forest land is handed over to user groups.

USAID influenced the direction of this act by engaging in policy dialogue with the Government of Nepal through: building coalitions with other donors; lobbying members of Parliament; coordinating efforts with the USAID-funded Democracy Project; acting as legal consultants to the Parliament; and building personal contacts within the Drafting Committee of the Parliament.

Program Impact

Evidence shows that villagers are now protecting forests in anticipation of eventual transfer of management authority. In many areas villagers were forming forest protection committees in advance of the actual hand over of management authority. The forests to be handed over most recently have been protected for 5 or more years before user groups were granted management authority. The planting of multipurpose fodder trees has increased. Farmers are planting trees on abandoned marginal lands as well as on their terrace risers and are even accepting a lower crop yield to plant fodder species there.

Forests under community forestry management or under informal protection have a measurable increase in tree growth and regeneration, improved ground cover, increased soil moisture retention, reduced soil erosion, and better wildlife habitat. Forest recovery was fastest in areas that were highly degraded. At a hillside site that was over harvested and over grazed, the density of the forest increased from 746 trees/ha in 1980 to 3,345 trees/ha in 1990. By one estimate, in 1980 the site contained 648 cubic meters of wood compared to 3,389 in 1990.

In addition, improved habitat provided by community forest management appears to favor an increase in wildlife populations and preservation of biodiversity. Although definitive data on wildlife populations are hard to obtain, the general perception among villagers is that wildlife populations have increased with the renewed growth of forests.

User group management of community forests has led to an increase in collective savings and investment in local development. Well-established forest user groups typically pool their earnings from fees and fines they levy into accounts used to support local

community development projects. However modest user group savings may be, investment of these funds represents an important development in collective decision-making, cooperation, and community self-help.

More efficient management of community forest resources has important implications for the work of rural women in Nepal. The net effect is an economizing of women's labor. Women have the major responsibility for activities directly related to food processing and preparation, which includes the harvesting of fuel wood for cooking and fodder for feeding of livestock. Any increase in the availability of forest resources will thus be felt most significantly by women.

Program Effectiveness

USAID support to the community forestry program, particularly through NGO project implementation, has influenced the greater participation of women and disadvantaged groups in community decision-making about natural resource management. The team found that participation in government and donor-funded, nonformal education classes has improved women's willingness to participate in forest user groups. However, their participation appears limited to formal inclusion in management committees.

Similarly, USAID has supported the inclusion of disadvantaged ethnic and occupational groups in forest management training and community forest management. These efforts have been more successful in villages where the population is not dominated by a single caste and where the forest user group is socially heterogeneous. The team found evidence of multicaste or multiethnic representation in the majority of the USAID-supported forest user groups.

By including women and members of disadvantaged user committees, disenfranchised members of society are beginning to be heard. More importantly, user group members are learning valuable lessons about working together to achieve a community benefit. The user groups and user group committees appear to be important building blocks to a more representative democracy in the country.

User groups are also demonstrating their political power. The evaluation team was told of user groups, some in Dhankuta District, banding together to form user group associations to lobby at the district level. At Bagmare in the Rapti Zone, the forest users group, with support from the Rapti Project, has petitioned the government to its highest levels for a policy change that will allow them to operate a saw mill. These forms of local empowerment were unheard of in Nepali history.

Program Sustainability

The empowering of user groups with the authority to manage their own forests has proven to be an effective strategy for sustainable conservation and utilization of natural resources in Nepal. The sustainability of those biophysical impacts and the effectiveness of the community forestry program will depend on the ability of the

Department of Forests to build trust with the local population and to make available the services necessary for the further development of the program as the benefits of forest protection begin to pay off in harvestable material.

In addition, the economic returns to improved community forestry management have begun to drive local development. The dramatic rise in interest by villagers in community forestry, moreover, is fueled by the perceived benefits from harvesting forest products. As the forests regenerate under protection, opportunities for community forests to fund local development needs will increase.

Program Replicability

The community forestry model is rapidly spreading throughout projects areas. The formation of user group managed community forests nationwide grew from 535 in 1991 to 1,172 in 1993. Increased awareness of community forestry, combined with a new emphasis on democratic government and user-group managed community forests, is overcoming an inherent distrust of government and pushing the community forestry program forward.

In-service training provided by the Rapti Project has had an impact extending beyond the project area. Because of the frequent transfer of forestry personnel (on average every 3 years) those trained by the project have spread the benefits of their training throughout Nepal.

Lessons Learned

Once policy is set, the most efficient method of extending community forestry practices is through the use of NGOs. NGOs are effective ways for extending government community forestry programs. NGOs can provide the continuous support necessary to get the community forestry model firmly rooted in a community's pattern of resource utilization.

Forestry projects can provide a vehicle for USAID to influence policy development in ways that are cost effective. The presence of forestry and natural resource expertise among USAID employees increases the opportunity to influence policy reform through policy dialogue and negotiation, the leveraging of other donor resources, and the transforming of lessons learned by NGOs into national practices.

Targeting women in training and extension efforts can improve effectiveness and sustainability of community based resource management. Women are not only major users of the forest resources but also are more often at home in the village. Targeting women, as a stable population, for training and extension activities improves the effectiveness of those training activities and helps to assure the sustainability of the development effort.

This Evaluation Highlights was prepared by Phillip Church of the Center for Development Information and Evaluation. It summarizes the findings from the USAID Working Paper "Forestry and the

Environment: Nepal Case Study," (forthcoming) by Fred Sowers, Michael Richlin, Richard English, Manzoorul Haque, Ava Shrestha, and Satish Prabasi. Readers can order copies of CDIE reports from the DISC, 1611 North Kent Street, Suite 200, Arlington, VA 22209-2111, telephone (703) 351-4006; fax (703) 351-4039.